

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) ~~A method and~~ A data processing apparatus for priority based data processing, comprising:

a data storage apparatus unit that stores a plurality of data having an importance and an identifier, respectively, comprised of a plurality of components;

a data processing unit that performs a processing for a data among the plurality of data, wherein the data processing unit updates the importance of the data in case of performing the processing for the data;

an important component selection apparatus unit that determines an order of the plurality of data in accordance with the importance and the identifiers~~selects a component having high importance;~~ and

a transmitter that transmits, to the important component selection unit, an importance and an identifier for a data among the plurality of data;

wherein the important component selection unit redetermines the order when the transmitter transmits the importance and the identifier; and

when the order has a data whose identifier is the same as the identifier for the data transmitted by the transmitter, a data with a lower importance, among both data having the same identifier, is excluded for the order redetermination.

~~an data processing apparatus that performs data processing programmed for each component, wherein~~

~~—the important component selection apparatus has a function of storing a plurality of sets of importance of a given component and a component identifier that indicates which component the importance represents, in descending order of importance, and a function of outputting a component identifier of a component having highest importance on a priority basis;~~

~~—the data processing apparatus has a function of performing data processing on a component related to the component having high importance, which is indicated by the important component selection apparatus, and then updating data on the component stored in the data storage apparatus according to a result of the data processing and re-evaluating the importance of~~

~~a changed component and sending out an updated value of the changed component to the important component selection apparatus, and~~
~~—the apparatuses can perform these functions parallelly and simultaneously.~~

3.-4. (Cancelled)

5. (New) The data processing apparatus of claim 1; wherein
the important component selection unit comprises a data arrangement control circuit and a plurality of registers, wherein
the data arrangement control circuit makes the plurality of registers hold the plurality of data in accordance with each importance of the plurality of data.

6. (New) The data processing apparatus of claim 1, wherein
a plurality of the data processing units are provided.

7. (New) The data processing apparatus of claim 6, wherein
a plurality of the data storage units and the important component selection units are provided.

8. (New) The data processing apparatus of claim 7, further comprising:
a first transfer control circuit that controls data transfer between the plurality of the data storage units and the plurality of the data processing units; and
a second transfer control circuit that controls data transfer between the plurality of the important component selection units and the plurality of the data processing units.

9. (New) A data processing method, comprising the steps of:
performing a processing for a data, among a plurality of stored data having an importance and an identifier, respectively;

determining an order of the plurality of stored data in accordance with the importance and identifier;

updating the importance of the data when performing the processing for the data;

redetermining the order when updating the importance of data; and

when the order has a data whose identifier is the same as the identifier for the data with the updated importance, excluding a data with a lower importance, among both data having the same identifier, for the order redetermination.

10. (New) A computer readable medium having stored thereon computer executable program for processing data, the computer program when executed causes a computer system to execute steps of:

processing for a data among a plurality of stored data having an importance and an identifier, respectively;

determining an order of the plurality of stored data in accordance with the importance and the identifier;

updating the importance of the data in case of performing the processing for the data;

redetermining the order in case of updating the importance of the data;

when the order has a data whose identifier is the same as the identifier for the data with the updated importance, excluding a data with a lower importance, among both data having the same identifier, for the order redetermination.